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<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/021,029	SHIMADA, KAZUNORI	
	<b>Examiner</b>	<b>Art Unit</b>	
	Krishnan S. Menon	1723	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE of 1/13/06.
2. ☒ The allowed claim(s) is/are 21 and 22; RENUMBERED 1 AND 2.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |                                                                                                                     |                                                                                        |
|---------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)                                                    | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|                                                                                                                     | 9. <input type="checkbox"/> Other _____.                                               |

### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Michele Mayberry on 2/15/06.

The application has been amended as follows:

Claims 1-20 were cancelled and new claims 21 and 22 were added to replace pending claims 9 and 13, respectively.

Amended claims list follows on a fresh page:

**Amended Claims List**

Claims 1-20 (Canceled).

21. (New) An antibacterial filter for filtering water, comprising:

a water introduction unit adapted for introducing water therein; a water purifier unit adapted for purifying the water introduced through said water introduction unit; and a water discharge unit adapted for discharging the water purified by said water purifier unit, wherein said water purifier unit comprises:

a cylindrical container having a central axis thereof;

a tubular cartridge of a doughnut-shape in cross section, which is disposed on the center axis of said cylindrical container;

a center pipe arranged to lie along said center axis and in communication with an opening formed in an inner wall surface provided at a lower portion of the cartridge;

a magnet disposed at a longitudinally intermediate portion of the center pipe and having central magnetic force of a predetermined intensity;

plural kinds of filter members arranged in layers in a water flow passage inside said cartridge; and

at least one of said plural kinds of filter members having propolis ceramics mixed therein;

said propolis ceramics comprising ceramics soaked in a solution of propolis extract, obtained from water-insoluble propolis material dissolved in alcohol, acetone or ether, and dried.

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22. (New) An antibacterial filter for filtering water, comprising:

a water introduction unit adapted for introducing water therein; a water purifier unit adapted for purifying the water introduced through said water introduction unit; and a water discharge unit adapted for discharging the water purified by said water purifier unit, wherein said water purifier unit comprises:

a container of cylindrical shape having an inside thereof, in which a tubular cartridge of a doughnut-shape in cross-section is disposed to have an interior thereof partitioned into upper and lower stages by a doughnut-shape partitioning member, said doughnut-shape partitioning member having a hole at the central portion thereof and an outer periphery defining a water passage extending between said outer periphery and an inner wall surface of said cartridge;

a center pipe inserted in said tubular cartridge to be arranged in said upper stage, above said doughnut-shape partitioning member;

a first filtering section arranged in said upper stage, and filled with activated carbon layer with which propolis ceramics are mixed;

a second filtering section formed in said lower stage constituting a rolled filter layer centrally having a spatial portion communicating with the center pipe, said rolled filter further having a heavy metal-adsorbing layer, a ceramic particle layer and a tubular filter arranged in order from the outer periphery toward the center of said rolled filter; and

a magnet disposed within the center pipe having a central magnetic force of a predetermined intensity.

The following is an examiner's statement of reasons for allowance:

The closest prior arts are Naito in view of Shibuya and Solomon. Naito teaches a filter having cylindrical container having plural filter media, ceramic media, and magnet as claimed. Shibuya teaches propolis antibacterial loaded on many different materials including ceramics materials, for various applications. Solomon teaches the doughnut shaped construction with internal pipe. However the combination does not teach ceramic loaded with propolis extract and dried as claimed as in claim 21 or the specific structure of the filter with the propolis ceramic mixed with activated carbon upstream of the multiple layer filter as in claim 22.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krishnan S. Menon whose telephone number is 571-272-1143. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Krishnan S. Menon  
Patent Examiner  
2/15/06

  
JOHN KIM  
Primary PATENT EXAMINER